

EN-2000™ Industrial Grade



EN-2000™ Industrial Applications

- SCADA
- M2M
- Legacy RTU, PLC & Sensor to Ethernet/LTE
- Video Surveillance
- Industrial Plant Floor Remote Monitoring
- Distributed Network

Standard Features

- Supports both wireless and wired transport
- License free, VPN, DMNR, GRE, IPsec & Layer 4 Firewall
- Modbus
- Two Ethernet ports, either LAN/LAN or WAN/LAN
- Small Footprint, Low Power Consumption, DIN Rail Mountable
- Enhanced traffic grooming using QoS
- Data Traffic types can be assigned to specific links, IP addresses
- One RS-232 and One RS-485 interface for legacy equipment

Cloud Management Available with enCloud™ Enterprise Management System



4G LTE INDUSTRIAL BROADBAND ROUTER

The Encore Networks EN-2000™ Industrial Router (IR) is a high performance low-cost broadband router designed for Ethernet and LTE Cellular networks. Built for the Industrial Internet of Things (IIoT), this compact IP M2M router provides license free IPsec, VPN, Firewall, Ethernet, Legacy Serial and IP interworking. The EN-2000™ can service the needs of mission critical communications of both complex SCADA applications and simple Machine-to-Machine (M2M) applications.

The EN-2000™ IR supports mission critical communications and control found in harsh environments on the industrial plant floor, electrical grid, water treatment, waste plants, and alternative energy sites. The EN-2000™ IR can connect directly to Legacy Serial based RTU, PLC and Sensors or newer equipment that is Ethernet based to communicate directly to one or multiple back office SCADA systems. Providing high-availability in both fixed broadband networks connectivity; DSL, cable, MPLS Ethernet or high-speed 4G LTE connection. The EN-2000™ IR router is ruggedized operating from -20° C to +70° C with a flexible powering option from 9 to 32 VDC or AC power. Native Modbus and other industrial protocols are supported for seamless ease an integration into back office operations.

The EN-2000™ can also operate as a stand-alone 4G LTE cellular solution to support sub-station, grid infrastructure, remote monitoring points and more. With the high speeds offered by 4G LTE cellular and low latency critical SCADA connectivity can be accomplished without traditional terrestrial connections. This makes the EN-2000™ an ideal choice for increasing equipment visibility, adding new services, to increasing the industrial intelligence of your network.

Exceptional Features at a Reasonable Price

The EN™ Series of cellular routers provides powerful features at a value price. The EN-2000™ is the flagship of this series and offers exceptional value. All the EN™ Series routers come with a three-year hardware warranty, an intuitive GUI interface, built-in Firewall, VPN support and advanced IP features including DMNR, GRE, and IPsec.

In addition, all of the EN™ Series routers can be monitored and managed with Encore's Enterprise Management System enCloud™. enCloud™ offers many features that will make managing your entire network of EN™ Series routers easier, including Cellular data limit enforcement for individual devices and group data plans, included firmware updates, no touch deployment for new hardware, and reseller and customer tiers to assist in delivering managed network services for multiple customers.



TECHNICAL SPECIFICATIONS

GENERAL FEATURES	Broadband Router
GLNERAL FEATURES	Secure VPN router
	Modem/Cellular IP Pass Through/Bridge Operation
	QoS enforcement to prioritize critical traffic
SECURITY APPLIANCE FEATURES	Stateful inspection layer 4 Firewall, NAT, NAT Port Forward HTTPS-SSL
	IPsec with AES 256 and 3DES 4 tunnels max
	Dead Peer Detection plus NAT Traversal
	Generic Router Encapsulation GRE (RFC 1701)
	Internet Key Exchange - IKE V1, V2
	OpenVPN
	Static routing
IP TRANSPORT PROTOCOLS	DHCP client/server
	IP QoS and traffic prioritization
	IP fragmentation/reassembly
	IP routing over VPN; TCP and UDP
	IPv6 Support
	Virtual Redundant Routing Protocol (VRRP)
	Asynchronous PPP
	DMNR
	PPPoE
	SPRINT:
CELLULAR	LTE CAT 1 10/5 Mbits
	Bands, 2, 4, 5, 12,17,25,26
	Support for 2.4 and 5 GHz
WIFI	Autoselect between 802.11a/b/g/n
	WEP or WPA-PSK encryption
	WiFi Access or Client
	LEDs for cell module, system status, network status, and power
PHYSICAL FEATURES	LEDs for LAN/WAN and Cellular signal strength indication
	One 10/100 Mbit/s Ethernet RJ-45 (WAN/LAN) - WAN is factory default
	One 10/100 Mbit/s Ethernet RJ-45 (LAN)
	One RS-232
	One RS-485
	Reset Switch
	Two SMA antenna connections for embedded internal cellular radio
	Two SMA antenna connections for detachable WiFi antennas
	One Accessible SIM Slot
	Power Input
	Optional DIN Rail Clip
	enCloud™ Device Management System
MANAGEMENT	GUI Web Management
	SSH (Secure Shell)
	SNMPv3 manageability
	HTTP/HTTPS - web access interface
	Telnet Syslog
	Height: 1.6 inches/40 mm
	Width: 5.7 inches/145 mm
	Depth: 4 inches/100 mm
	· Weight: 1 lb. (0.45 kg)
END//DONALDITAL	Operating: -20° C to +70° C
ENVIRONMENTAL	Storage: -40° C to +85° C
	Humidity: 5% to 95%, non-condensing
CTANDARDS COMPANY	RoHS Compliant
STANDARDS COMPLIANCE	CE Compliant
	EMC, FCC Part 15, EN 55011/CISPR II
	9 to 32 VDC or 100 - 240VAC Autoranging,
	47-63Hz Power Supply (12V input)
	Power Consumption - 3.5 watts nominal, 7 watts transmitting
	UL/CSA 60950-1, EN 60950-1
PRODUCT SAFETY	CAN/CSA-C22.2 No. 60950-1-03

Specifications subject to change without notice

